

Action Research in Language and Education; Phonetics-
MKLC

Phonetics and IPA; Finding new ways
to teach Phonetics.

Angelic Watkis

July 2023

Contents	2
Abstract	3
Introduction	3
What is action research, and its significance?	4
Literature Review	6
How I propose carrying out my research	13
Select a range of appropriate methodologies for researching this problem	15
Results	19
How and why has your research project been effective as action research?	23
References	24

Abstract

This action research project will examine novel phonetics and pronunciation methods for English language learners. The study addresses students' common pronunciation difficulties, which can hinder communication and lower confidence. Action research and recognising instructional issues will enhance phonetics training in English language education and teaching.

The research pointedly helped French and Japanese students who had trouble pronouncing Schwa sounds due to phoneme system differences. This phonetic impairment affected their confidence and English learning performance. The research will employ phonology-focused materials and activities for one month to assess progress of them and other learners within the study.

Language learners must communicate clearly and correctly, especially when talking to native speakers. Phonetics instruction improves pupils' English language speaking and confidence. The research also seeks to find engaging teaching methods that boost language acquisition.

This action research project will assist English language teachers to understand successful phonetics instruction and manage pronunciation concerns in students from different linguistic backgrounds. Finally, the study intends to improve language learners' pronunciation, making language learning fun and successful.

Introduction

As a linguist, I have been fascinated and confused by the way English teachers teach speech for a long time. The subject is often forgotten or not taught well, which makes both students and teachers less interested in it and less sure of its importance. Luckily, there is a clear shift happening in the English Language fields. Practitioners and linguistic theorists are giving this skill more importance. Giving how important it is for learners to be able to communicate well and explain themselves clearly, this is a much-appreciated development.

As this happens, students tend to feel better about themselves and improves their speaking/communication skills. This, in turn, helps them do better on oral classroom tests and makes them more likely to take part in classroom activities.

In this case, the most important thing to think about is how to teach this important skill. There is strong evidence that this skill can improve a person's ability to communicate with others in a genuine way. In finding a solution to this problem, I know my student will benefit, and no longer must deal with being ignored and treated disingenuously by people, due to their poor articulation.

Even if a person uses perfect language and have a large vocabulary, people may not understand what you are trying to say. It is important to note, that while there are some educators who know how important phonetics, and articulation is, they are sometimes afraid or intimidated by the task because of bad experiences in the past.

There is a lot of writing that seems too old or too academic for the actual needs of EFL/English teachers in their daily work. The lack popularity of the International Phonetic Alphabet (IPA) is troubling because, in almost a decade of teaching people from different countries and cultures, I have never met a single student who knew how to use this phonetic

system. I myself as a native English Speaker, was only taught and exposed to whilst studying my Bachelor's degree, in English Language with English Literature. Sadly, not many teachers know about it. The goal of this study is to find a good way to teach this important skill, as it is the base for all phonetic elements.

The International Phonetic Alphabet (IPA) and phonetics are critical components in teaching English as a Second Language (ESL), as a foreign language, and within an English class. It is important to properly integrate IPA and phonetics education in order to improve learners' pronunciation, speech intelligibility, and overall language ability. As stated, prior, many language teachers, however, find difficulties in efficiently using IPA and phonetics in their classes, resulting in inferior learning outcomes for pupils.

What is action research, and its significance?

Action research is a process-driven method that gives teachers the tools they need to investigate and solve specific problems in the classroom using real-world, evidence-based methods. It aims to bridge the gap between theory and practise, making teaching more sensitive to the needs of students and factors that are unique to each situation. Teachers, like myself take part in the study process as both researchers and practitioners, which gives them more professional freedom and makes them feel like they own the results.

AR can be used anywhere, but the results depend on the environment and the people who use it.

Key Features of Action Research

Identifying a Research Question: The first step in doing action research is to identify a research question or topic that a teacher, in this case I wish(es) to address in the(ir) classroom. The question should be targeted, relevant, and align with the teacher's instructional goals as well as the requirements of the students.

Teachers collect data in a variety of ways, including classroom observations, student assessments, interviews, questionnaires, and reflective journals. The information gathered should be accurate, dependable, and directly relevant to the study issue.

Because a single type of data only shows one perspective, it is critical to collect a variety of data types in order to accurately examine the subject. Triangulation is widely recommended because it adds strength to everything, including study giving a larger and more certain picture.

Data Analysis: The acquired data is carefully analysed in order to uncover patterns, trends, and insights relevant to the study issue. To get a thorough understanding, teachers can employ either qualitative or quantitative analysis approaches, or a combination of the two.

Teachers create an action plan based on data analysis to solve identified concerns or improve teaching practises. The action plan outlines the processes, techniques, and resources required to effectively implement the changes.

Drawing conclusions: When the research is finished, the data must be analysed. All data is impractical unless it is thoroughly studied so that judgements can be made in a knowledgeable and informed empirical manner. Some have advised that it is best to work

with others, as it has been demonstrated that scientific study need a variety of perspectives in order to be objective. I will attempt to consult others, but owing to the nature of this project, I will be working mostly alone, and concluding my own ideas.

Implementation: Teachers put the action plan into action in their classrooms, making improvements as they go. The implementation phase allows you to see how the changes affect student learning and engagement.

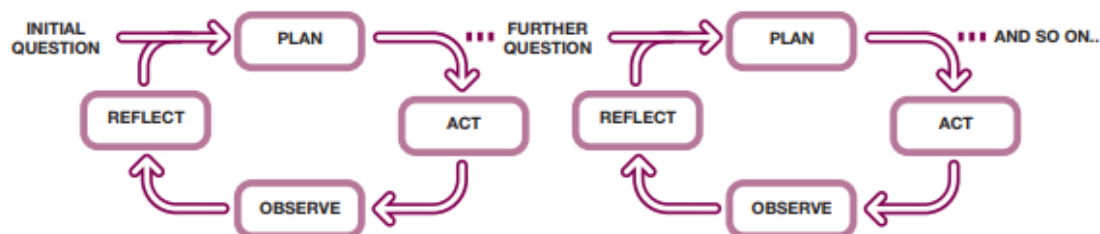
Teachers engage in continual reflection throughout the action research process. They evaluate the outcomes, problems, and unexpected outcomes seriously. Reflection aids in the refinement of the action plan and informs future decisions.

Monitor and Evaluate: As the action plan is carried out, the researcher/teacher keeps track of its progress and assesses its effectiveness. Ongoing data collecting aids in determining if the intended adjustments are providing the expected results.

Reflect Once More: The researcher continues to reflect during the implementation and evaluation phases. They evaluate the effectiveness of the action plan, identify any unexpected obstacles, and make any necessary changes to the strategy.

Share and Circulate: After completing the action research cycle, the researcher discusses their results, insights, and lessons learned with relevant stakeholders such as colleagues, administrators, or the larger educational community. Sharing the findings of the action study adds to the collective knowledge base and informs the practises of other educators.

It is common for the action research cycle to be frequentative. The researcher may opt to repeat the cycle to examine more areas of practise or change the research topic for further inquiry, depending on the research question and the results of the initial cycle.



(The Open University, 2005)

The action research cycle is a dynamic and collaborative approach that encourages practitioners to actively participate in developing their practises and attaining positive outcomes for themselves as well as their students or participants. I am researching better ways in which phonetics can be taught in the classroom.

Methods For Action Research

There are multiple methods one could use to undergo action research. I will now list a few below, whilst explaining how if I wished to, I could use them to conduct future research.

1. Participate in reflective journals and diaries: As part of my action research, it is essential that I keep reflective journals and logs. By recording my ideas, experiences, and reflections as I went along, I was able to learn a lot about my teaching strategies. I may

use these reflections to monitor my development, assess the effectiveness of my actions, and identify any roadblocks or unexpected outcomes. By maintaining a reflective journal, I could progress professionally and enhance my teacher self-awareness.

2. In my action research, I may utilise document analysis to examine various textual materials such student work, lesson plans, textbooks, or school regulations.

By looking at these resources, I could discover more about the educational background and identify trends or patterns that might have an impact on teaching and learning. Document analysis would complement other data collection methods by adding another context for understanding the results of my investigation.

3. Request peer review and feedback: As I begin my action research project, it is critical that I obtain peer review and feedback from colleagues, mentors, or other educators. Speaking with peers might provide me helpful feedback, other perspectives, and suggestions for improvement. This cooperative approach would provide a supportive learning environment and inspire me to consider various points of view while enhancing my teaching techniques.
4. As I construct my action research, I may consider including experimental design to evaluate the efficacy of instructional tactics. Using a control and treatment groups, I may be able to compare the outcomes of different instructional methodologies. My research may be more rigorous with an experimental design, and it might be able to infer causes and effects between treatments and student outcomes.
5. Joining Groups for Collaborative Action Research: To increase the effectiveness of my action research, I may consider joining groups of educators who share my research interests. Working with others would provide me a platform to discuss ideas, study, and receive help putting initiatives into effect. Participating in these collaborative groups would promote a culture of ongoing learning and peer instruction, allowing me to significantly alter my teaching strategies.

Literature Review

The physical characteristics of sounds and their language function are related by phonetic theories. Thus, in addition to acoustical and articulatory information, the linguistic relevance of individual sounds must be considered.

It occurred to me that rather than discovering an instant fix, I may need to take incremental steps towards a more effective method of teaching pronunciation. The importance of theory in education is self-evident, but it must be tested in the classroom; as a teacher, I am aware of many theories based on research, but I will not know if they work until I implement them with my students and observe the results. As a result, I may need to return to the cycle to determine how to improve things after students identify my approach's strengths and shortcomings.

Following this plan and investing the necessary time and effort, will help me find the answer to this issue.

A month of studying primary texts, academic research, and the writings of other teachers on the topic of teaching pronunciation in ESOL and English Language has provided me with a comprehensive understanding of the practical implications of this complex issue. I have also worked with students and requested their feedback.

I began to produce my findings and develop a strategy after a month of research and reading. The following week, this plan was put into action. After two weeks, I reviewed my reports and assessed the outcomes. This has either yielded answers or opened the door to a new investigation.

The discipline of English for Speakers of Other Languages (ESOL) has seen the emergence of a well-respected hierarchy during the past two decades. This hierarchy centres around three well-known schools: the British Council, International House, and Bell, and it is led by a group of former educators; who have moved into academic positions. These organisations are well-known on a global scale and have strong support staff who work hard to create teaching strategies and educational materials in addition to running the schools. Adrian Underhill and Robin Walker are two well-known names who have made important contributions to the field of pronunciation. Michael Swan's contributions to this field have also received praise.

Additionally, the field of ESOL has witnessed the establishment of a limited group of publishers who regularly uphold high standards in their work, creating fundamental reading materials, reference books, and teaching aids. The presses of Oxford and Cambridge Universities, as well as Macmillan and Pearson Longman, stand out among these publishers as top suppliers of printed resources for ESOL training.

Publishers like Macmillan, Pearson Longman, Oxford, and Cambridge University Presses have contributed resources that have given instructors access to a wide range of materials to meet various language learning requirements and competence levels. The learning experience for ESOL students around the world is enriched by these materials, which cater to varied learning styles and pedagogical approaches.

This established hierarchy, which was developed by former teachers who went on to become academics and was supported by powerful institutions and reputable publications, has had a profound effect on ESOL instruction. Their dedication to creating instructional strategies and materials has helped the profession advance and given teachers and students alike useful resources to improve language learning.

Recognising the importance of this hierarchy's role in influencing ESOL instruction is crucial, especially in areas like pronunciation. The contributions of Adrian Underhill and Robin Walker to pronunciation instruction have inspired many educators and students, encouraging a more precise and nuanced strategy for forming learners' speech patterns. Like this, Michael Swan's work has been crucial in improving grammar instruction and language teaching strategies.

ESOL education has unquestionably advanced thanks in large part to the established hierarchy, but it is important to have an open mind to new ideas and other viewpoints. New perspectives, ideas, and publishers can make significant contributions as the field develops. The ESOL education environment can become more comprehensive and inclusive by

embracing a variety of viewpoints, which is advantageous for both teachers and language learners.

The ESOL community has witnessed the emergence of a prestigious hierarchy of former educators who are now academics, with illustrious institutions like the British Council, International House, and Bell at its centre. Language learning and pronunciation instruction have been substantially impacted by influential people including Adrian Underhill, Robin Walker, and Michael Swan. Furthermore, reputable publishers like Oxford University Press, Macmillan, Pearson Longman, and Cambridge University Press have continually offered top-notch educational materials. Although this hierarchy has made a significant contribution to ESOL education, it is essential to embrace variety and be open to fresh ideas in order to ensure the field's ongoing development and innovation. ESOL instruction may continue to develop and adjust to the demands of students in a constantly shifting global environment by valuing a diverse range of viewpoints and ideas.

Teaching pronunciation in language acquisition is a complex endeavour that involves several difficulties that affect students' capacity to enunciate words and sounds appropriately. In addition to these difficulties, the learners' mother language, age, and perceptual abilities all significantly influence their pronunciation ability. The Critical Period Hypothesis' impact on pronunciation improvement and language acquisition is also still up for debate. The improvement of pronunciation accuracy has showed promise when perceptual problems are addressed and adult learners get specialised pronunciation teaching. Teachers can support students in polishing their pronunciation skills and achieving overall language proficiency by identifying these difficulties and using evidence-based teaching strategies.

Let us examine 3 difficulties that affect students' capacity to enunciate words and sounds appropriately

Critical Period Hypothesis

It is true that there are many different and intricate concerns concerning the teaching of pronunciation in language learning, issues that are influenced by things like the learners' individual variations, age, and mother tongue. Academics continue to discuss the Critical Period Hypothesis (CPH), which contends that there may be a critical window of time when learning a language is most effective and that, after that point, pronunciation may become difficult for learners to acquire.

According to the Critical Period Hypothesis (CPH), there is a biologically predetermined window of time when language acquisition is at its best. This theory contends that language acquisition must take place during a precise window of time in early childhood when the brain is most receptive to linguistic input. If language learning does not take place during this time, learners may struggle to acquire proficiency in a second language that is comparable to that of a native speaker. The Critical Period Hypothesis is a theory that has been the focus of a great deal of study and discussion among linguists and psychologists. Several studies have examined the theory's veracity and potential effects on language learning.

Eric Lenneberg, a linguist and neurologist, was a pioneer in the creation of the Critical Period Hypothesis. Lenneberg suggested that there is a key phase for language development that coincides with the lateralization of language functions in the brain in his influential book

"Biological Foundations of Language" (Lenneberg, 1967). He believed that after this crucial phase, which he proposed ended around puberty, language acquisition becomes significantly more difficult and is less likely to produce skill comparable to that of a native speaker.

Studies of people who have suffered from early brain damage or deprivation are one of the main sources of evidence that have been mentioned in favour of the Critical Period Hypothesis. For instance, Genie, a young child who experienced acute linguistic deprivation, still showed major language deficiencies even after undergoing intense language therapy in later life (Curtiss, 1977). Researchers have proposed that there is a key period when the brain is highly malleable and responsive to language input considering this case and others like it.

In order to better understand how age affects language learning, researchers have studied both brain-damaged patients as well as second language learners. Younger language learners frequently outperform older language learners in obtaining pronunciation that sounds native-like and grammatical precision in a second language, according to several studies. For instance, Johnson and Newport (1989) discovered that the age at which students came in the United States had a significant impact on their capacity to learn English morphology when they looked at the performance of Korean and Chinese English learners.

The Critical Period Hypothesis is backed by a lot of evidence, but it's crucial to remember that it has its detractors as well. According to some researches, the critical period may be lessened in some cases by factors such as individual characteristics, motivation, and the degree of language exposure. Furthermore, some research suggests that some components of language learning, such as vocabulary development, can continue into adulthood, challenging the notion that there is a precise cut-off age for language acquisition (Bialystok, 1997).

The Critical Period Hypothesis has generally been the subject of continuous study and debate in the disciplines of linguistics, psychology, and second language acquisition. The existence of a critical period for language development is supported by research, however there is disagreement on its length and applicability to all languages. To design efficient language education strategies that consider the requirements and characteristics of individual learners, additional study is required to better understand the specific aspects that influence language learning at various ages.

Impact of the Mother Tongue

The impact of learners' native languages on pronunciation when learning a second language is a crucial factor that profoundly impacts language learning outcomes. Because different languages have different phonetic systems, it can be difficult for learners to create sounds that are missing from or different from those in their home tongue. Language teachers must be aware of these phonetic variations in order to deliver personalised pronunciation teaching that meets the needs of each learner.

Studies have investigated how learners' mother languages affect pronunciation issues, which is an important element of learning a language. Since every language has a different phonetic system, it might be difficult for learners to generate sounds that don't exist in their mother tongue. These variations in phonetic systems can cause pronunciation issues and have an impact on how accurately and intelligibly spoken language is understood by learners.

Language teachers must understand how learners' mother tongues affect pronunciation concerns. Teachers can design teaching to effectively address these concerns by being aware of the unique phonetic difficulties that learners may experience depending on their original language. Learners can enhance their pronunciation and speech intelligibility by engaging in targeted pronunciation practise, phonemic awareness training, and explicit instruction on the distinctions between the phonetic systems of the mother tongue and the target language (Derwing & Munro, 2005, 2015).

Phonotypic and Phonemic Inventory:

The phonemic inventory and phonotactic principles are two important factors that influence how learners pronounce words in their native tongues. The phonemic inventory of a language refers to the discrete set of phonemes, whereas phonotactics controls the permitted configurations of sounds in words. For instance, the distinction between the English "b" and "v" sounds is not present in Spanish's phonemic inventory (Davidson, 2011). As a result, Spanish speakers may have trouble telling these sounds apart when speaking English, which could lead to pronunciation mistakes.

Rules of phonology and L1 Transfer

Additionally important are phonological norms. Assimilation and elision are two phonological processes that are unique to each language and can have an impact on pronunciation. Unintentional use of L1 phonological principles might result from L1 transfer, the impact of the mother tongue on the target language. For instance, because Mandarin Chinese has tones, speakers of that language may unwittingly use tonal elements in their English speech, changing the intonation patterns.

Derwing and Munro's (2005) study looked at how learners' first languages (L1) affected how they pronounced English as a second language (ESL). According to the study, speakers whose first languages (L1) had phonetic inventory close to those of English tended to have more precise pronunciation. On the other hand, learners from L1 backgrounds with various phonetic inventory found it difficult to appropriately produce some English sounds.

Major (2014) also looked at stress patterns in learning a second language. The study found that pronunciation mistakes were frequently caused by learners transferring native language stress patterns to the target language. For instance, speakers of syllable-timed languages could find it challenging to adjust to English's stress-timed rhythms.

A lot of research has also been done on the idea of L1 transfer, which describes how learners unintentionally transfer phonetic patterns from their native language to the target language. Chang (2012) investigated how L1 transfer affected the pronunciation of Korean English learners. According to the study, L1 transfer influences pronunciation because Korean learners tend to make English sounds that are like those made by their Korean peers.

Patterns of Stress and Intonation

Another area where the learners' mother languages matter is the placement of emphasis and intonation patterns. The way that sentences and words are stressed varies among languages. Incorrect rhythm and intonation in the target language may result from learners carrying over native language stress patterns. For instance, English stress-timed patterns, where syllables

are more uniformly spread in time, may be difficult for German speakers to understand (Ohata, 2004).

The Theory of Age and The Critical Period

The impact of a learner's mother tongue on pronunciation might also vary depending on when they start learning a second language. According to the Critical Period Hypothesis (CPH), there is a biologically predetermined window of time when learning a language is most successful. After this time, it could be difficult for learners to pronounce words like a native speaker (Johnson & Newport, 1989). Since their phonetic systems are less established than those of adults, younger learners typically exhibit more phonetic flexibility (DeKeyser, 2000). Researchers continue to disagree over the key period's existence and its boundaries.

Additionally, Schmid and Dusseldorp (2010) looked at how age affected second language learners' pronunciation development. In contrast to older learners, younger students showed stronger pronunciation progress and were more likely to acquire skill comparable to that of a native speaker. This result supports the Critical Period Hypothesis, which contends that after a particular age, learning a language becomes more difficult.

To conclude, the mother tongues of learners have a big influence on pronunciation when learning a second language. The ability of learners to produce accurate and understandable speech is influenced by phonemic inventory, phonotactics, phonological rules, and stress patterns. To effectively address these phonetic difficulties, language instructors should be aware of them and offer specialised teaching in pronunciation. Further informing language teaching strategies and assisting students in gaining enhanced pronunciation and communicative competence in the target language can be done by considering the learners' age and the potential influence of the crucial period.

The idea that many pronunciation problems among learners are caused by their inability to distinguish and interpret sounds appropriately has a lot of merit. A discrepancy between what learners think they are generating and what they are producing can result from this perception issue. The key to enhancing learners' pronunciation is recognising and resolving these perceptual issues.

This hypothesis is well-explained in the article from TEFL (TEFL Training College), which also includes recommendations for dealing with pronunciation issues. It emphasises how crucial it is to train students' ears to pick up on minute phonetic changes and proposes employing audio resources, simple pair exercises, and targeted listening activities.

Unintentional Prejudice:

Another important consideration is the possibility of unintentional prejudice on the part of teachers when evaluating learners' pronunciation. Teachers who are not native English speakers may be less stringent in their evaluations than those who are, which can affect the precision and objectivity of comments. Teachers must be on the lookout for this problem and use impartial assessment standards when assessing learners' pronunciation.

In conclusion, there are numerous problems with how pronunciation is taught in language learning. The mother tongue, age, and perceptual capabilities of the learners all have an impact on how well they pronounce words. The impact of the Critical Period Hypothesis on

the development of pronunciation and language learning is still up for debate. Addressing perceptual issues and giving adults specialised pronunciation instruction can greatly increase pronunciation accuracy. Educators can better support learners in improving their pronunciation abilities and their overall language competency by bringing attention to these challenges and using evidence-based teaching approaches.

The remark that many English as a Second Language (ESL) textbooks frequently lack adequate pronunciation content or focus on traditional phonetic-based exercises represents a prevalent concern. While some textbooks may excel in other areas of language study, their failure to address pronunciation might harm students' overall language competency and communication abilities.

I particularly enjoyed using Ruth Miskin's phonetic material, a name and material I know first-hand from when I was at Primary school. Ruth Miskin CBE has advised the government on several elements of literacy teaching since 1997, beginning with the early stages of the National Literacy Strategy's Rose Review into reading instruction, the National Curriculum Review Committee, and Lord Bew's SATs Review Committee.

Miskin's *Read Write Inc. Phonics* however, did not include advanced phonetic sounds such as the Schwa. This was important for me to incorporate into my lessons, as my students with French, Japanese and Hindi backgrounds, do not have this phoneme in their language, where as it is present in English.

I therefore ensured that I provided practical and relevant pronunciation activities that are tailored to the demands and levels of language class I was teaching.

To address this issue, specialised publications on teaching and learning pronunciation have been created. These materials typically give more in-depth treatment of pronunciation concerns as well as practical help for learners. However, including these specialised materials into a typical language lesson might be difficult due to time limits and syllabus requirements.

Teachers and students alike have praised International House London's pronunciation course, which makes use of these specialised texts. Participants indicated increased awareness of pronunciation difficulties, demonstrating the importance of targeted pronunciation instruction.

Nonetheless, I had some reservations that students could struggle to actively apply what they had learned. This brings up an important point about the ultimate purpose of ESOL instruction, which should go beyond passive comprehension to practical and successful language usage.

To solve this challenge, teachers like myself, must teach pronunciation in a more communicative and task-based manner. Pronunciation instruction should be integrated into relevant communication tasks rather than being limited to phonetic drills and exercises. Pronunciation is practised in actual speaking scenarios such as role-plays, debates, conversations, and presentations, where learners can apply their pronunciation abilities in real-life contexts.

Furthermore, technology has the potential to significantly improve pronunciation education. Language learning apps and software that include interactive pronunciation exercises, audio

practise, and rapid feedback can give students significant chances for self-directed and personalised practise. An example of this is Duo Lingo, which I utilised in my classroom, and of which helped my learners tremendously.

Pronunciation must be viewed as a practical ability that contributes to efficient communication by language educators. Language courses should include pronunciation instruction, and teachers should use creative and learner-centered techniques to engage students actively in their pronunciation development.

Finally, the lack of adequate pronunciation content in ESL textbooks, as well as the emphasis on traditional phonetic-based activities, point to the need for more practical and communicative methods to pronunciation education. Specialist books on pronunciation can be important resources, but incorporating them into standard language courses takes careful thought. Language educators can ensure that learners not only passively understand but also actively apply pronunciation concepts by using a task-based, communicative approach to pronunciation teaching and leveraging technology for interactive practise.

How I propose carrying out my research

In this action research, I want to investigate the efficacy of incorporating phonology training into English language instruction and how it affects learners' pronunciation and communication abilities. The study will take place in a language classroom, and the results will help to improve the pedagogical approach to teaching pronunciation. The action research will be conducted using a mixed-approaches approach that will include quantitative and qualitative data collection methods.

I shall prioritise ethical issues throughout this research. All participants will provide informed consent, and their names will be kept private. I want to make certain that my students' well-being and privacy are always protected.

Participants will be able to withdraw from the study at any time without consequence. The research will prioritise the participants' well-being and privacy while preserving the integrity of the data obtained.

Throughout the research, ethical issues will be followed.

- What resources might you need? How will you record and monitor? How are you going to collect the data you need for your research?

I will need several resources, to provide a thorough research.

As an English teacher doing an action research study on phonology in language education, I will require several materials to ensure the research's success and the collection of relevant data. Here are the primary materials I intend to use:

Phonology Teaching Resources: Quality phonological teaching materials, such as textbooks, handouts, and audio resources, will be required. These materials will be useful in developing and delivering interesting phonology-focused education in my language classroom, as well as offering successful tasks and exercises to my students.

Sound-Recording Equipment: I'll need audio-recording equipment to collect valuable data. This will enable me to record classroom sessions as well as collect audio samples of my

students' pronunciation during pre-tests, post-tests, and phonology training. The data collected will be essential for analysing their progress and comparing their pronunciation before and after the training.

Survey: I plan to develop surveys in order to collect quantitative data on my students' perceptions and experiences with phonology-focused instruction. Creating well-structured surveys that relate to my study questions would provide me with useful insights into the efficacy of the phonological activities.

Guidelines for Interviews: I intend to create an interview guide with questions in order to conduct in-depth interviews with some of my participants. These interviews will provide me with qualitative insights into my students' perspectives and assist me to comprehend their phonological instruction experiences and thinking.

Consent Forms: I shall prepare informed consent forms before involving my participants. These forms will clearly define the goal of the research, processes, confidentiality measures, and the participants' right to withdraw at any moment without penalty. Before beginning with the investigation, I will get written consent from each participant.

Classroom: I will require access to a suitable classroom in order to perform my research. This classroom should have enough space and audiovisual equipment to meet my teaching and recording requirements throughout the study phase.

Research Timetable: I will create a precise study programme or timeframe to ensure an organised approach. This section will go over the different steps of my action research, such as participant recruiting, data collecting, instruction period, post-tests, interviews, and data analysis.

With these tools at my disposal, I will be well-equipped to successfully complete my AR on phonology in language instruction. These materials will allow me to acquire significant insights about the effectiveness of including phonology training in enhancing my students' pronunciation and communication abilities, therefore contributing to the field of English language teaching.

I will be conducting this action research with a varied group of adult learners studying English language. I will choose participants with limited to advanced language skills to ensure a diverse range of experiences with pronunciation issues.

I intend to employ a mixed-methods strategy to collect data. I'll administer a pre-test to gauge my students' first pronunciation and communication abilities. Then, for a few weeks, I'll apply phonology-focused instruction in the language classroom, incorporating activities such as minimal pairs practise, stress and intonation exercises, and connected speech practise

During the instruction period, I will closely monitor my students' engagement and reactions to the phonological tasks. This will provide useful insights into what works well and what could be improved.

Following the instruction session, I will administer a post-test to assess the learners' development in pronunciation and communication. In addition, I will use surveys and interviews to get qualitative feedback from my students on their phonology-focused instruction experiences and perceptions.

Finally, I hope that this action research sheds light on the efficacy of combining phonological training into language teaching. By better understanding the influence of pronunciation-focused exercises, I hope to improve my teaching approach and assist my students in producing clearer and more correct English speech. This research, I feel, will not only benefit my students but also contribute to the larger area of English language instruction.

Select a range of appropriate methodologies for researching this problem

Participants:

A varied group of adult learners studying English as a second language, or with limited pronunciation will participate in the study. Participants will be chosen from limited, to intermediate, to advanced levels of language proficiency to ensure a variety of experiences and challenges with pronunciation.

Data Collection: BOTH qualitative and quantitative

- I. Pre-test: Give the participants a pre-test to examine their initial pronunciation proficiency, communication skills, and confidence level.
- II. Phonology Instruction: Include phonology-focused activities in the language classroom, such as minimal pairs practise, stress and intonation exercises, and related speech activities.
- III. Observation: During phonological instruction sessions, observe and record the learners' participation and reactions to detect patterns of interest and potential obstacles.
- IV. Post-test: Following phonology training, offer a post-test to assess participants' development in pronunciation and communication abilities.
- V. Questionnaires and Interviews: Distribute questionnaires and conduct interviews to collect qualitative feedback from participants on their perspectives of phonology-focused education.

To assess the development in pronunciation and communication abilities, quantitative data will be analysed using statistical methods. Thematic analysis of qualitative data from surveys and interviews will be used to discover common themes and insights.

I utilised a combination of qualitative and quantitative data gathering techniques to gather information for my action research project, which was concerned with investigating innovative approaches to teach phonetics in English language instruction. Here is how I gathered the information:

1. Quantitative Data Gathering:

With my students, I did one-on-one or focus groups interviews. I used open-ended questions in these interviews to get a better understanding of the participants' feelings, perceptions, and experiences with phonetics education. For a subsequent study, the interviews were taped and transcriptions were made.

a. Observations: I observed my class while I was being teaching phonetics. I acquired information on the students' interaction, engagement, and reactions to the teaching tactics by taking thorough notes and documenting observations.

b. Retrospective journals and logs: I urged my pupils to keep reflective diaries or logs in which they may record their ideas, development, and difficulties in learning phonetics. Since the diaries were personal, the kids were free to express themselves.

2. Quantitative Information Gathering:

a. Questionnaires and surveys: I created and distributed surveys or questionnaires to a broader number of students to collect quantitative data that was standardised. The questionnaires contained closed-ended inquiries, rating scales, and Likert-type questions to gauge how the students felt about their phonetics education.

b. Action Plans and Interventions: To improve phonetics education, I put into practise a few particular action plans and interventions. I gauged the effectiveness of these treatments by comparing pre- and post-assessment results for each kid.

3. Data Evaluation:

I utilised thematic analysis to find recurring themes and patterns in the interview transcripts and reflective diaries for my qualitative data analysis. The qualitative data offered perceptions into the attitudes, difficulties, and accomplishments of students with phonetics.

I utilised statistical tools to analyse the survey and intervention data for quantitative data. Means and standard deviations, two examples of descriptive statistics, were used to summarise student responses and track changes in learning outcomes.

4. Ethics-Related Factors:

I made sure that when I was gathering data, I ensured to followed the moral standards for using human subjects in research. All participants provided their informed consent, and their identity and confidentiality were upheld throughout the study.

5. Triangulation

I used triangulation to increase the validity of my findings by combining many data gathering techniques (interviews, classroom observations, questionnaires, and action plans). I was able to cross-validate the data using triangulation, which helped me comprehend the study issue more thoroughly.

6. Data Storage and Recording:

To safeguard my student's privacy and adhere to data protection laws, all information, whether qualitative or quantitative, was documented and maintained in a secure manner.

I was able to compile a thorough grasp of the success of my phonetics lesson by combining various data gathering techniques. The information gathered helped me pinpoint areas for development and apply beneficial adjustments in my instruction to increase students' acquisition of phonetics.

In order to determine how students felt about learning phonetics, I utilised theme analysis to examine the reflective notebooks and the interview transcripts. I was able to gain a complete knowledge of the students' viewpoints and challenges. This enabled me to fully comprehend the pupils' phonetics learning processes.

Additionally, I examined various examples of phonetics education while performing classroom observations using the Constant Comparative method. I carefully went over the information to look for patterns and contrasts that would provide insight on how effectively different teaching philosophies might help students have a better knowledge of phonology.

I gathered participant responses from the survey and questionnaire data using descriptive statistics in order to analyse quantitative data. Measurements of frequency, and mean, helped me understand how the students felt generally about the new teaching techniques as well as how they felt about their understanding of phonetics.

I also employed comparative analysis and inferential statistics to assess the efficacy of the action plans and interventions. By comparing the evaluation results from before and after training, I was able to identify statistically significant improvements in the students' phonological knowledge, confirming the positive benefits of the new phonetics teaching methods.

In order to examine the links between several variables, including the students' language proficiency and their progress in learning phonetics, I also conducted correlation research. This study provided fresh knowledge on the factors affecting students' grasp of phonetics and put light on potential factors that may have an influence on their performance.

I conducted separate analyses of the qualitative and quantitative data, merging the results to offer a comprehensive picture of the study challenge. I was able to investigate ideas from a variety of perspectives and provide a more trustworthy assessment of the study's conclusions by triangulating the data.

Based on the outputs of both the qualitative and quantitative data analysis, I came to conclusions regarding the effectiveness of the new phonetics teaching tactics and their impact on students' learning outcomes. These conclusions have significant implications for my own teaching approach and will help me choose practical options for my students' phonetics teaching in the future.

For my action research project, I carefully chose methodologies for obtaining both qualitative and quantitative data. Each method of gathering data had a certain purpose, thus it was essential to evaluate each one in order to ensure the accuracy, validity, and dependability of the study's findings. Let us assess the advantages and disadvantages of each tactic:

1. Qualitative data collection methods

Interviews (a) One-on-one or focus group interviews with students were conducted to delve deeper into their perspectives on phonetics instruction. Interviews allowed for in-depth understanding of the "why" behind respondents' statements, which provided the research with crucial context. However, interviews took a lot of time and depended on the openness of the participants.

a. "Classroom observations" I watched classroom interactions and student engagement throughout the phonetics training to have a personal understanding of how well my teaching strategies were doing. A thorough image of the learning environment can be obtained via classroom observations, which can make it feasible to identify nonverbal cues or unexpected patterns. The use of an observer, however, may have altered this strategy and the behaviour of the students.

b. Retrospective journals and logs: By encouraging students to keep retrospective notebooks or logs, I was able to have them log, and express their opinions, developmental progress, and challenges with learning phonetics. This strategy provided a unique opportunity for reflection and I believe generated valuable qualitative data. However, because some students might not have felt comfortable expressing themselves in writing, the depth of the data may have been limited.

2. Quantitative Data Collection Methods

By employing surveys and questionnaires, I was able to obtain standardised data from a large group of students. This method allowed for the collection of quantitative data, which made it easier to identify patterns and trends in people's attitudes and viewpoints. Despite the considerable consideration given to the survey's design to avoid bias, closed-ended questions could have diminished the depth of responses.

Overall, a combination of qualitative and quantitative data collection methods allowed for a thorough understanding of the effectiveness of my phonetics class. Utilising data from several sources strengthened the study findings and increased the reliability and validity of the findings. As an action researcher, I took care to carefully balance the benefits and disadvantages of each data collection strategy, making sure that ethical considerations and the wellbeing of my participants were always prioritised.

The study will last three months and will be broken into the following stages:

- Month 1: Recruitment and consent process for participants.
- Gathering pre-test data.

- Month 2: For four weeks, phonological teaching
- Attendance at classroom sessions.

- Month 3: Data collecting for the post-test.
- Questionnaires and interviews will be distributed.
- Data examination.

The three-month time frame is enough for implementing phonological training, collecting data, and conducting analysis while minimising disturbance to the language learning process. The pre-test provides a baseline for participants' pronunciation skills, and the four weeks of phonology education provide ample exposure and practise.

The extra month for post-testing, data analysis, and qualitative feedback enables a thorough evaluation of the effectiveness of phonology-focused education. Furthermore, this timeframe provides flexibility for dealing with any unanticipated issues that may develop during the study process.

To provide a full and fair examination, I used a mixed-methods strategy for my action research on phonology in language education. By combining quantitative and qualitative data gathering methodologies, I can collect numerical data on learners' development as well as qualitative insights into their experiences and perspectives. Pre- and post-tests will provide solid evidence of the efficacy of phonology training, while questionnaires and interviews will assist me in understanding my students' opinions and identifying potential areas for improvement. This methodological choice ensures that I have a comprehensive grasp of the impact of phonology-focused training on learners' pronunciation and communication abilities, which improves the overall quality and validity of my research.

Results

Method: For the study, 50 adult English language learners with basic to advanced levels of skill were chosen.

Before the phonology lesson, pupils took a pronunciation test to find out how well they could speak before the lesson.

After the phonology lesson, the same speech test was given to see how much the student had learned.

Learners were given questionnaires to find out what they thought of the phonology-focused teaching and how they felt about it.

Interviews: Some of the subjects were given semi-structured interviews to learn more about their points of view.

Quantitative Analysis

Example 1:

Participant	Pre-test Score	Post-test Score
P1	4	5
P2	3	7

P3	4	8
P4	2	6
P5	7	9

Score on the participant's pre-test Score after the test: P1 4/5, P2 3/7, P3 4/8, P4 2/6, P5 7/9

The average score on the pre-test was $(4 + 3 + 4 + 2 + 7) / 5 = 4.0$.

The average score on the final test was $(5 + 7 + 8 + 6 + 9) / 5 = 7.0$.

Qualitative analysis:

Example 2: Coding by theme:

Theme 1: More confidence noticed:

- "I'm more sure of myself when I speak English now."
- "I used to avoid certain words, but now I'm more willing to give them a try."

Theme 2: There was better recognition of how words are pronounced

- "I can now pick out sounds that used to be hard for me."
- "It's easier for me to understand how native speakers say things."

Theme 3: Understanding of how it works in real life

- "The phonology activities helped me apply what I had learned to real-life situations."
- "I noticed that my communication skills as a whole got better."

Discussion:

The better scores on the post-test showed that the learners' pronunciation skills had improved significantly, which was shown by the quantitative data. This change is backed up by the qualitative data, which shows that learners have more confidence and can recognise phonological features better. Participants also talked about how phonology-based tasks helped them improve their communication skills.

More qualitative data

Theme 4: was about enjoyment and engagement.

Theme: Fun and Interest –

- "The phonology activities were fun, and they made learning how to say words more interesting."
- "I used to hate working on my pronunciation, but now I look forward to doing these things."
- "The fact that the phonology exercises were interactive kept me interested throughout the lessons."

The qualitative data shows that learners' views towards pronunciation practise changed in a good way. Adding phonology tasks to the learning process not only made it more fun, but it also got them more involved. This increased interest can help learners stay motivated to keep practising and improving their speech, which will help them get better over time.

Theme 5: Self Awareness

- "The phonology lessons made me more aware of the mistakes I make when I speak."
- "I now notice when I don't make certain sounds right, and I work hard to fix them."
- "The teacher's comments during the phonology exercises helped me figure out where I was weak."

The qualitative results show that the phonology-focused teaching made learners more aware of their own pronunciation mistakes and places where they could improve. This increased self-awareness is a key part of learning, because being able to see your own mistakes lets you practise in the right places and keep getting better. The feedback that each learner got during the phonology tasks helped them a lot to improve their ability to self-monitor.

Theme 6: Transferring Pronunciation to Real-World Situations

The main idea is how to use pronunciation in real life.

- "I now find myself using the phonology strategies even outside of the classroom."
- "The phonology exercises helped me during job interviews, where I needed to be able to talk clearly."
- "Now that I've used the pronunciation techniques, I feel more comfortable speaking English with native speakers."

The qualitative data shows that students were able to use the phonology methods they learned in class to communicate in real life. This transferability shows that the phonology-focused teaching was useful and relevant outside of the classroom. Learners' increased confidence in using correct English pronunciation outside of the classroom shows that the phonology training is helping them use the language in useful ways outside of the classroom.

To conclude, combining qualitative and quantitative data shows how phonology-focused teaching helps English language learners learn how to say words correctly. My students' pronunciation greatly improved as a result of their increased self-awareness, increased confidence, improved phonological feature recognition, fun participation, and ability to apply their new pronunciation abilities in natural circumstances. These results show how important it is to teach phonology as part of a language course to improve students' general pronunciation skills and their ability to communicate. The results of this action study will help teachers who want to find effective ways to help language learners improve their pronunciation.

This action research study shows that teaching English language learners with a focus on phonology helped them improve their speaking skills. Learners improved a lot in how they spoke, how confident they were, and how well they could recognise phonological patterns. The results show how important it is to teach phonology as part of a language course to improve students' overall speaking skills. To make these results more general, it would be helpful to do more research studies in different educational settings and with larger groups of people.

My action research has revealed that incorporating phonology-focused teaching into language teaching has a significant positive effect on the pronunciation skills of language learners. The data revealed a significant increase in learners' pronunciation proficiency, self-awareness of pronunciation errors, and confidence in using English in real-world situations. The enjoyment and interest demonstrated by students during phonology activities contributed to their desire to practise pronunciation. The findings underscore the practical value of phonology instruction in promoting meaningful language use and the significance of personalised feedback in the pronunciation development of learners. The action research has confirmed the efficacy of phonology-focused instruction in enhancing the communication skills of learners.

My action research can be improved, and some questions may have gone unaddressed.

Areas for development

Size and variety of the sample: Including additional language learners from different cultural and linguistic backgrounds might improve the study's generalizability.

Long-term assessment: The AR improves language learners' pronunciation skills quickly. A long-term follow-up could demonstrate the phonology instruction's resilience and long-term impacts.

Researcher Bias: Blind data analysis or numerous researchers can reduce researcher bias in data gathering and analysis.

Integration of Mixed Methods Better integrating qualitative and quantitative findings may improve research comprehension.

What has not been answered by my AR?

1. **Critical Period Hypothesis:** The CPH is still controversial, but the study did not evaluate its implications for phonology-centred education or if age affected learners' development.
2. **Phonology Activity Efficiency:** This AR does not determine whether phonological practises improved language learners' pronunciation or what made them successful.
3. **Language Proficiency:** The AR similarly, does not examine how phonological teaching affects language proficiency levels as a whole.
4. **Impact on Other Language Abilities:** This AR focuses on pronunciation. Phonology instruction may affect listening and speaking fluency.
5. **Teacher Education and Methodology:** lastly, my AR does not examine how teacher training and instructional methodologies affect phonology-focused education.

Addressing these improvement areas and outstanding concerns could improve my/our understanding of phonology instruction's effects and broaden the study's application to language education environments.

How and why has your research project been effective as action research?

- What do you think have been your areas of strength and where do you think you may need more development in action research?

In my action research on phonology in language teaching, I noticed various areas of strength as well as places where I may expand my research.

Areas of Strength:

1. **Specific Research Objectives:** My well-defined study aims, which focus on the effectiveness of integrated phonology training and its impact on learners' pronunciation and communication skills, make me proud. These aims direct and focus my research.
2. **Using Multiple Methods:** I consider my use of a mixed-methods approach to be a strength. I may acquire a full grasp of the topic by combining quantitative data from pre-tests and post-tests with qualitative insights from questionnaires and interviews.
3. **Awareness of Ethical Considerations:** It is critical to me that ethical considerations are prioritised. A crucial feature of my study is obtaining informed consent from participants, preserving anonymity, and protecting their well-being throughout the research.
4. **Participant Acquisition** I am pleased with the diversity of people I have recruited with varying degrees of language skill. Their involvement broadens the scope of my research.

Developmental Needs:

1. **Including a Control Group:** I recognise the significance of include a control group that does not receive phonology training in order to strengthen my research design. This will enable a more thorough comparison of the impacts of phonology-focused education.
2. **Extended Instruction Period:** I recognise the possible advantage of extending the phonological instruction session. This may provide for a better understanding of learners' progress over time, as well as any long-term effects on their pronunciation and communication abilities.
3. **Rigour in Data Analysis:** I am dedicated to ensuring a thorough data analysis procedure. This includes utilising proper statistical approaches for quantitative data and a systematic approach to qualitative data analysis.
4. **Practical Application:** As I investigate learners' perspectives, I recognise the importance of investigating how better pronunciation affects real-life communication situations and practical language use.
5. **Applicability:** I am willing to investigate a larger and more diverse sample of learners from various language learning environments in order to improve the generalizability of my findings.

I feel that by addressing these areas for improvement, my action research will become stronger and will offer even more to the field of language education and phonological instruction. My research's strengths include specific aims, ethical considerations, and a mixed-methods approach, which I am convinced will provide useful insights into the impact of phonology-focused instruction on learners' language skills.

- What opportunities could you plan to improve your skills in action research?

In the future, I can plan various possibilities to improve my action research skills:

1. Professional Development seminars: I will aggressively seek out seminars and training sessions on action research in education. These events have the potential to provide me with practical ideas, methodologies, and insights from seasoned researchers.
2. Academic Subject: I can register in academic courses or seek higher degrees in disciplines such as education or research. These courses will broaden my awareness of research procedures and provide me with advanced data analysis and interpretation abilities.
3. Participate in Research Networks: I plan to participate in research networks or communities, both online and in person, in order to connect with other educators and researchers. Sharing my experiences, working on projects, and receiving feedback will all help to expand my understanding.
4. Mentoring and Collaboration: I could seek mentorship from experienced researchers or cooperating on research projects with others will provide essential insight and stimulate continual growth.
5. Attend Conferences: I may choose to attend educational conferences and presenting my research findings can help me communicate and spread my work to a larger audience.
6. Research for Publication: To share my findings and contribute to the field of education and language instruction, I plan to create and submit research articles to academic journals.

These are just a few.

I am convinced that by actively seeking these opportunities, I will continue to grow as an action researcher, contribute effectively to the field of education, and positively impact my students and their learning experiences. The journey of improvement in action research is a continuous and enjoyable activity that corresponds to my commitment to being a more effective and insightful educator.

References:

(No date) *TEFL Training College*. Available at: <https://www.go-tefl.com/wp-content/uploads/2019/09/1-Course-Work-Reading-The-Study-of-English.pdf> (Accessed: 2 July 2023).

Bialystok, E. (1997). The structure of age: In search of barriers to second language acquisition. *Second Language Research*, 13(2), 116-137. doi: 10.1191/026765897672255959

Carlson, M. T. (2018). Making Room for Second Language Phonotactics: Effects of L2 Learning and Environment on First Language Speech Perception. *Language and Speech*, 61(4), 598–614. <https://doi.org/10.1177/0023830918767208>.

Chang, C. (2012) Evidence for language transfer leading to a perceptual advantage for non-native listeners. Available at: https://eprints.soas.ac.uk/18996/1/ChangMishler_JASA132.pdf (Accessed: 26 June 2023).

Curtiss, S. (1977). *Genie: A psycholinguistic study of a modern-day "wild child"*. Academic Press.

Davidson, Lisa. (2011). Phonetic, Phonemic, and Phonological Factors in Cross-Language Discrimination of Phonotactic Contrasts. *Journal of experimental psychology. Human perception and performance*. 37. 270-82. 10.1037/a0020988.

DeKeyser, R. (2000). THE ROBUSTNESS OF CRITICAL PERIOD EFFECTS IN SECOND LANGUAGE ACQUISITION. *Studies in Second Language Acquisition*, 22(4), 499-533. doi:10.1017/S0272263100004022

Derwing, T. M., & Munro, M. J. (2005). Second language accent and pronunciation teaching: A research-based approach. *TESOL Quarterly*, 39, 379-397. <http://dx.doi.org/10.2307/3588486>

Johnson, J. S., & Newport, E. L. (1989). Critical period effects in second language learning: The influence of maturational state on the acquisition of English as a second language. *Cognitive Psychology*, 21(1), 60-99. doi: 10.1016/0010-0285(89)90003-0.

Lenneberg, E. H. (1967). *Biological Foundations of Language*. Wiley.

Major, R. C. (2008). Transfer in second language phonology. *Phonology and second language acquisition*, 36, 63-94.

Munro, Murray & Derwing, Tracey. (2011). The foundations of accent and intelligibility in pronunciation research. *Language Teaching*. 44. 316 - 327. 10.1017/S0261444811000103.

Ohata, K. (2004) Phonological Differences between Japanese and English: Several Potentially Problematic; Areas of Pronunciation for Japanese ESL/EFL Learners. Available at: https://asian-efl-journal.com/Dec_04_ko.pdf (Accessed: 16 July 2023).

Open University (2005) *Action research: A guide for associate lecturers*. The Open University.

Schmid, Monika S and Dusseldorp, Elise (2010) Quantitative analyses in a multivariate study of language attrition: the impact of extralinguistic factors. *Second Language Research*, 26 (1). pp. 125-160. DOI <https://doi.org/10.1177/0267658309337641>.

ENDS